

OCT - 8 1991

Mr. Edgar G. Kaup, P.E.
Case Manager
Bureau of Federal Case Management
New Jersey Department of Environmental Protection and Energy
401 East State Street, CN 028
Trenton, NJ 08625-0028

Re: Work Plan for In-Situ Bioremediation Treatability Testing for
the L. E. Carpenter Company (aka Dayco Corporation) Site

Dear Mr. Kaup:

The U. S. Environmental Protection Agency, Region II (EPA) has completed its review of the September 16, 1991 Work Plan for In-Situ Bioremediation Treatability Testing for the L. E. Carpenter Company Site. The plan is acceptable to EPA, however, some clarifications may be useful as noted in the EPA comments which are enclosed.

Please contact me at 212 264-8098 if you wish to discuss this matter.

Sincerely yours,

Jonathan Josephs, Project Manager
New Jersey Superfund Branch II
Emergency and Remedial Response Division

cc: D. Kampbell, ORD

347003



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EPA Comments on the Work Plan for In-Situ Bioremediation
Treatability Testing for the L. E. Carpenter Company Corporation
Site

General Comment

The proposed treatability tests would evaluate biodegradation and soil flushing under saturated test conditions. How could the results be used to predict effectiveness for remediation of the unsaturated zone?

Specific Comments

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| 1-4 | A potential difficulty for both in-situ biodegradation and soil flushing is that contaminants such as xylenes and DEHP may be trapped in soil pores and, for that reason, may not be easily biodegraded or flushed. The results of the proposed column flushing/leaching tests should provide some insight into whether this potential difficulty could present a problem for the bioremediation of site soils. |
| 2-5 | In the second complete paragraph, it may be useful to present the estimated hypothesized loading rate for full scale soil flushing in the work plan. |
| 2-7 | The last sentence in the second to the last paragraph could be better explained. What is meant by the comparison of the maximum test permeation rate to the natural permeability of the soil? Does the latter phrase refer to the natural rate of groundwater permeating a unit of soil area? Why is the one order of magnitude ratio important? |